

AMENDMENT

1. (currently amended) A flow control system, comprising:
 - a substantially rigid vessel having first and second ends;
 - the first end of the rigid vessel having an inlet and an outlet;
 - a process fluid reservoir situated in the rigid vessel in fluid communication with the inlet and the outlet; and
 - a drive fluid reservoir situated in the rigid vessel;
 - a diaphragm ~~movable member~~ positioned in the rigid vessel that separates the drive fluid reservoir from the process fluid reservoir, such that movement of the ~~movable member~~diaphragm in a first direction causes process fluid to be drawn into the inlet and movement of the ~~movable member~~diaphragm in a second direction causes process fluid to be expelled from the outlet; and
 - a pump in fluid communication with the working fluid reservoir to selectively meter working fluid into and out of the working fluid reservoir, such that metering working fluid out of the working fluid reservoir displaces the diaphragm in the first direction to draw process fluid into the inlet and metering working fluid into the working fluid reservoir displaces the diaphragm in the second direction to expel process fluid from the outlet.
2. (original) The flow control system of claim 1, wherein the rigid vessel comprises a cylinder.
- 3-6. (canceled)

7. (original) The flow control system of claim 1, wherein the inlet and the outlet include inlet and outlet check valves, respectively.

8-11.

12. (currently amended) The flow control system of claim 1-11, wherein the diaphragm is fabricated from PFA

13-20 (canceled)

21. (currently amended) A method of controlling the flow of slurry to a CMP tool, comprising:

providing a disposable bag preloaded with slurry ~~reservoir containing slurry~~;

situating the disposable bag in fluid communication with a slurry outlet;

connecting the CMP tool to a ~~the~~ slurry outlet ~~in fluid communication with the slurry reservoir~~; and

collapsing the ~~slurry reservoir~~ disposable bag to expel slurry from the ~~slurry reservoir~~ disposable bag to the CMP tool at a desired flow rate.

22-23. (canceled)

24. (currently amended) The method of claim 21, wherein the ~~slurry~~
~~reservoir~~disposable bag and a movable member are situated in a rigid vessel, and wherein
collapsing the ~~slurry reservoir~~disposable bag comprises moving the movable member in a first
direction.

25. (currently amended) The method of claim 21, wherein the ~~slurry~~
~~reservoir~~disposable bag is situated in a rigid vessel, and wherein collapsing the ~~slurry~~
~~reservoir~~disposable bag comprises pumping a working fluid into the rigid vessel.

26-27. (canceled)